

CATALOGUE #: 4D30

PRODUCT NAME: Monoclonal mouse anti-D-dimer

Recombinant MAbs: RD15

Recombinant monoclonal antibody expressed in a mammalian cell line.

MAbs *in vitro*:

DD3cc, DD6cc, DD41cc, DD44cc, DD46cc, DD189cc, DD255cc

Mouse monoclonal antibody produced in bioreactor. Hybridoma clone derived from hybridization of Sp2/0 myeloma cells with spleen cells of Balb/c mice.

MAbs *in vivo*:

DD1, DD2, DD4, DD5, DD22, DD93

Mouse monoclonal antibody produced in ascites. Hybridoma clone derived from hybridization of Sp2/0 myeloma cells with spleen cells of Balb/c mice.

Immunogens:

D-dimer for RD15, DD1, DD189cc, DD2, DD255cc, DD3cc, DD4, DD5, DD6cc

Mixture of D-dimer and high molecular weight fibrin degradation products for DD22, DD41cc, DD44cc, DD46cc

Synthetic peptides covering the cross-linked region of D-dimer gamma-chain for DD93

Specificity:

D-dimer and high molecular weight fibrin degradation products, cross-reactivity with fibrinogen for DD4, DD5, DD6cc.

D-dimer and high molecular weight fibrin degradation products, no cross-reactivity with fibrinogen for RD15, DD1, DD189cc, DD2, DD22, DD255cc, DD3cc, DD41cc, DD44cc, DD46cc.

D-dimer, high molecular weight fibrin degradation products and a cross-linked region of D-dimer, no cross-reactivity with fibrinogen for DD93.

MAb isotypes:

IgG1 for RD15, DD93, DD189cc, DD255cc

IgG2a for DD1, DD6cc, DD22, DD41cc, DD46cc

IgG2b for DD2, DD3cc, DD4, DD5, DD44cc

Applications:

Immunoassays for the quantitative determination of D-dimer and high molecular weight fibrin degradation products. All MAbs recognize D-dimer in ELISA.

Recommended pairs for chemi-luminescence and lateral flow:		
Capture	Detection	Platform
DD189cc	RD15	CLIA
DD189cc	DD255cc	CLIA
RD15	DD41cc	CLIA, LF
DD255cc	DD41cc	CLIA, LF
DD3cc	DD46cc	CLIA, LF

Recommended pairs to be used in a sandwich immunoassay for D-dimer detection in human plasma:		
Capture	Detection	Remarks
DD189cc	RD15	Equal specificity for D-dimer and high MW fibrin degradation products
DD189cc	DD255cc	Equal specificity for D-dimer and high MW fibrin degradation products
DD2	DD41cc	Slightly more specific for high MW fibrin degradation products
DD2	DD4 *	Approximately equal specificity for D-dimer and high MW fibrin degradation products

*Due to the cross-reactivity of DD4 with fibrinogen, we strongly recommend using it as the detection antibody. In a sandwich immunoassay, plasma must be diluted at least two-fold with 10 mM Tris-HCl, pH 7.5, 1 M NaCl, 0.1 % Tween 20 to avoid nonspecific binding. Each step in the assay should be followed by an incubation and wash: coating with the capture MAb, addition of the sample and addition of the (conjugated) detection MAb.

CATALOGUE #: 4D30

PRODUCT NAME: Monoclonal mouse anti-D-dimer

All MABs recognize D-dimer in Western blotting under non-reducing conditions.

DD22, DD41cc, DD44cc, DD46cc and DD189cc interact with beta-chain of D-dimer in Western blotting under reducing conditions.

DD93, RD15 and DD255cc interact with gamma-chain of D-dimer in Western blotting under reducing conditions.

Purification: Protein A chromatography

Presentation: 50 mM sodium citrate, 150 mM NaCl, pH 6.0, 0.09 % sodium azide (NaN₃) for RD15

PBS, pH 7.4, 0.09 % sodium azide (NaN₃) for DD3cc, DD6cc, DD41cc, DD44cc, DD46cc, DD189cc, DD255cc, DD1, DD2, DD4, DD5, DD22, DD93

Storage: +4 °C (+2 ... +8 °C allowed)

Material safety note: This product is sold **for research or further manufacturing use only**. Standard Laboratory Practices should be followed when handling this material.

Product contains sodium azide as a preservative. Although the amount of sodium azide is very small appropriate care must be taken when handling this product.